EDITORIAL ARTICLES.

KAREWSKI ON THE SURGICALLY IMPORTANT SYPHILOMATA AND THEIR DIFFERENTIAL DIAGNOSIS.[1]

The inconstant and changing picture of constitutional syphilis, says the author, is especially characterized by the fact that the pathological phenomena produced by it show similarities with a host of affections, which the physician has always to consider, in order that, in individual cases, the patient be not exposed to severe injuries. Not very infrequently the question will present itself to the surgeon whether to destroy or remove organs important to both life and function, in cases where energetic antisyphilitic treatment might bring about a perfect recovery. There is, indeed, hardly a branch of surgery in which the possibility of the presence of syphilis is not to be considered. The diseases of the joints, as well as those of the bones, especially as far as they concern chronic inflammatory processes, the ulcerous and lupous destruction of the skin, but above all the tumors, which form such an extensive field for operative surgery, are to be mentioned here. The relation of syphilis to tumors has always, and particularly recently, excited the interest of surgeons, as a large number of tumors, which most frequently are surrendered to the knife, resembles so much certain products of syphilis that even a post-mortem or microscopical examination does not admit of a definite conclusion. The practical importance of this is not to be underestimated, as just the malignant neoplasms go to make up the greatest number of these cases, and these, again, it has been found, arise by preference at the seat of predilection of the syphilitic neoplasm, viz., in the muscles, mucosa, testicles and, although less frequently, in the mamma.

[1]Berliner Klinik, heft. 18, 1890.

The author speaks of the pathology, macroscopic and microscopic appearances of the syphilomata and, also, mentions some general points of differential diagnosis between syphilomata and other tumors. He then describes the syphilitic tumors of the different parts of the body, beginning with:

I. *The syphilitic tumors of the muscles.*—Confounding syphiloma of this part of the body with other tumors may become very serious,as the latter are usually of a very malign character and therefore require prompt and extensive surgical interference for their removal. Many surgeons have removed important structures with the mistaken "malignant" tumors, and finally found out that they had operated on gummata. Such cases are reported by Sidney Jones and Bier. Many less serious operative procedures might have been avoided by a correct diagnosis." It was formerly thought that a syphilitic tumor of the musculature was a rare affection. This view was the principal cause of errors in diagnosis. Sarcomatous primary neoplasms are, on the whole, rare in this part of the organism, whilst the reports of the occurrence of syphiloma increase steadily. It has been found in all muscles of the trunk, as well as those of the extremities. Its seat of predilection is the sterno-cleido mastoid, which was attacked in nearly one-third of all observations.

The shape of the tumor is different according to whether diffuse myositis or the development of circumscribed gummata be in question. The former process is expressed by a uniform increase in the size of the muscle, which may attain three times its original size; the latter process is associated with the formation of roundish tumors of the size of a dove's to that of a stork's egg and even larger. Moreover, both conditions may be combined, if circumscribed nodes develop within fibrous formations, and then nodous growths will result. Their consistency is tense, elastic, sometimes softer, at other times of an extreme hardness. Their consistency will be elastic or soft if recent quickly-forming tissue predominates, and hard if fully-developed connective tissue be present. There may also exist fluctuations, if a necrotic process has taken place, which has been observed to occur spontaneously, as well as after traumatism. The skin covering the tu-

mor is, in most cases, displaceable and unchanged. If suppuration sets in then the skin may become adherent to the tumor, inflamed and eventually perforated. Very valuable for the diagnosis is the peculiarity of the syphiloma to remain circumscribed in the affected muscle. In spite of the enormous size which these tumors sometimes attain, they hardly ever show a tendency to extend over to another muscle. Two and more nodes may appear in the same muscle, or such may be present simultaneously in isolated groups, but the anatomical limit is never overstepped; regional degeneration, as in malignant tumors, do not occur, and the affected part can be distinctly differentiated from the surroundings. This fact seems to be the only typical characteristic of the syphiloma. Some authors emphasize the absence of symptoms, others mention violent neuralgias. Karewski, himself, had occasion to observe all varieties of symptoms, from slight abnormal sensations to the most violent attacks of pain, from the absence of any functional disturbance to severe contractures. Of importance in the differential diagnosis are the nocturnal exacerbations of the symptoms. The size of the tumor has no influence on the severity of the symptoms. Traumatism has an aggravating influence. Syphilitic tumors of the musculature may, if they do not undergo necrosis, exist for years. Their prognosis is favorable if recognized in time, and they are absorbed quickly under antiseptic therapy. A much more unfavorable exit will result if operative measures be employed, through false diagnosis. Besides the above mentioned points of differential diagnosis the following affections and differential points, according to the author, should be kept in mind, with which syphilomata of the musculature may be confounded; viz., in the first place sarcoma, then the other tumors, rheumatic indurations, actinomycosis (Bier) and the parasitic diseases of the muscles (cysticercus, echinococcus). Primary carcinoma occurs extremely rarely in the muscles, and then mostly in the muscles of the abdomen as the so-called desmoid. It grows very quickly and encroaches upon all the neighboring structures, whilst the gumma remains circumscribed. The nocturnal pains associated with the syphilomata should also be remembered. The writer thinks that macroscopic examination of the tumor will reveal much more than

microscopic examination. Cysticercus is rarely observed to occur solitary in the muscles, but, as a rule, multiple; it is much smaller than most syphilomata. Echinococcus is differentiated by fluctuation, hydatid fremitus, or by exploratory puncture. The author also emphasizes in doubtful cases the employment of antisyphilitic therapy before operative measures are decided upon.

II. *Gummatous tumor of the tongue.* The author includes under this head not the diffuse syphilitic affections of the tongue (syphilitic macroglossia, etc.), but merely those pathological processes which lead to the formation of a tumor. Of surgical importance is only that stage of the formation of the tumor, which, later, may be confounded with carcinoma of the tongue. Gummata of the tongue may pass, like gummata of the muscles, through all stages, indurate and disappear. Most frequently they soften in their centres, break open and form a funnel-shaped ulcer, with excavated thickened raised edges, which has a great tendency to attack the healthy surrounding tissue, and to extend over a larger area. In general, these ulcers cause little or no pain, except some troublesome disturbance in speech and deglutition. When healing, white radiating scars, with loss of substance, result. Very characteristic for the differential diagnosis between gumma and carcinoma are the localized pains associated with the latter. The pains may, however, be absent in carcinoma and present in gumma, just as well as with the latter (gumma) we may have enlargement of the maxillary glands. If anti-syphilitic therapy gives, in such cases, no satisfactory result within 14 days, operation is indicated, for in case of cancer the favorable time for operation with prospects of success should not be missed.

Besides the confounding of syphiloma with carcinoma it may be also mistaken for tuberculosis. This is, however, rare, and the discovery of tubercles or bacilli will furnish sufficient proof for a conclusive decision.

Diffuse or semi-lateral inflammation of non-syphilitic origin (glossitis and hemi glossitis) will be differentiated by the acute course of these

affections, and the involvement of certain nerves. Actinomycosis will be excluded by the absence of the actinomycosis-granules.

Everything which has been said in regard to the formation of tumors of the tongue, holds good, also, for those of the lips, which, as has been recently emphasized by Esmarch, are not rarely of syphilitic origin.

Another seat of predilection, next in degree to the muscles, for syphilitic tumors, is:

III. *The testicle.*—The syphilitic neoplasms of the testicle develop gradually, at first presenting localized hard nodular spots, and later affecting the entire parenchyma of this organ. Their form is roundishly oval, simulating the original shape of the testicle. They are, in recent cases, of an elastic consistency, but later become hard and cartilaginous by sclerosation of the newly formed connective tissue. In the later stages the tumor is entirely painless, and this indolence is regarded as characteristic for the differential diagnosis. In the earlier stages there may be no pain, little pain, or very severe pain upon pressure. The spermatic cord and the epididymis remain, as a rule, unaffected. The course of the disease is exquisitely chronic, extending over years. Very rarely is its development acute. Syphilitic disease of the testicle may be unilateral, as well as bilateral. The latter is, according to Kocher, usually the case. Syphiloma of the testicle may be confounded with tuberculosis and cancer. Regarding tuberculosis—this begins always in the epididymis, and develops for a long time only here, rarely encroaching upon the testicle itself. Just the opposite is the case with syphiloma. The size of the tumor comes also into consideration. Syphilitic disease produces large and smooth tumors, while tuberculosis is marked by small, especially irregular, nodulous tumors. Also the participation of the spermatic cord and the prostata in tuberculosis is an important point in the differential diagnosis. Finally, in tuberculosis, suppuration is the rule, whilst in syphilitic diseases this is rare. The differentiation of syphilitic from malignant tumors of the testicle is, at times, very difficult, as just such persons who have had syphilis are often attacked by malignant tumors

(Kocher). The course of the two processes is similar, but necrosis appears much more frequently in cancer, and the pains in cancer are of a severer nature. In carcinoma, also, secondary cancer-nodes will be discovered. The epididymis and spermatic cord remain unaffected in syphilitic tumors, but are attacked in carcinoma of the testicle. In cases where the differential diagnosis is very difficult, and where extensive caseation of the organ has taken place, the author advocates extirpation.

The rarest and least known syphiloma is that of:

IV. *The mamma.*—According to Billroth, so rare are the descriptions of this, that he thinks it impossible to give a clear view of this form of disease. The author limits himself to the circumscript form. This, according to Lancereaux, develops more frequently in women than in men. It consists, in the beginning, of a small node, increases rapidly, within four to five weeks, in size, is uneven and nodular to the touch, and of elastic soft consistency. The tumor very soon undergoes necrosis, which is marked by deeply-situated fluctuation and sympathetic affection of the skin. The latter becomes adherent to the tumor, reddens, gets thinned out, and finally is perforated. The tumor causes little or no pain at all, and after ulceration has taken place it does not increase in size, but collapses after its contents have been emptied. The glands of the axilla are not as extensively involved as in carcinoma. Syphiloma of the mamma, may, therefore, only be confounded with fibro-adenoma, sarcoma and carcinoma in its initial stages. Syphiloma distinguishes itself from fibro-adenoma in that it grows very rapidly, is painless, and very soon undergoes softening. Adenoma also appears chiefly at puberty, between the 16th and 25th year, and rarely is of large size, whilst syphiloma may, within a few weeks, reach the size of an apple.

The differential diagnosis of carcinoma may become more difficult, as this may increase very rapidly in size without pain, and, also, is of soft consistency. The early presence of a node in the mamma and sympathetic affection of the axillary glands will easily lead to the right diagnosis. Regarding carcinoma, the slow development of the tumor, the involvement of the axillary glands, the characteristic appearance of

the skin, the retraction of the nipple, and the adherence to the pectoral fascia, will prevent a wrong diagnosis.

At the end of his work the author says, in regard to the therapy of the syphilomata, that they require the general therapeutics of syphilis, but, under certain circumstances, may necessitate operative procedure. He emphasizes the importance, in even obstinate cases, of the iodide of potassium and mercury. The most efficacious treatment, he thinks, is the combination of both—local inunction with mercury and large internal doses of iodide of potassium.

ALBERT PICK.